USSR/Cosmochemistry - Geochemistry. Hydrochemistry, D

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 732

Abstract: conditions. This is supported by the presence in the ore district of moisture-loving flora which in future geological prospecting can be used as an indication of the occurrence of GC.

Card 2/2

VOSKOBOYNIKOV, M.Ye.

Stratigraphy of Mesozoic deposits in the lower reaches of the Syr Darya. Izv.AN Kazakh.SSR. Ser.geol. no.24:107-111 '56.

(MLRA 10:2)

(Syr Darya Valley--Geology, Stratigraphic)

VOSKOBOYNIKOV, M.Ya.

Stratigraphy of Paleogene deposits in the lower reaches of the Syr
Darya. Izv.AN Kazakh.SSR geol.no.25:57-78 '56.   (MLRA 10:2)
    (Syr Darya Valley--Geology, Stratigraphic)

AUTHOR   VOSKOBOYNIKOV, M.,
TITLE   PA - 2928
           On the Period of Settling of the Platform System in the East of the
           Near-Aralian Region.
           (O vremeni ustanovleniya platformenogo rezhima v vostochnom Priaral'ye -
           Russian)
PERIODICAL Doklady Akademii Nauk, SSSR, 1957, Vol 113, Nr 1, pp 165-168, (U.S.S.R.)
           Received 6/1957   Reviewed 7/1957

ABSTRACT   The region of cretaceous rock between Kazalisk and Dzusal was regarded
           as a buried continuation of the Kara-Tau-chain. It was, however, found
           that it is a great separated Dzusal-elevation. In the cores of the struc-
           tures of second and third order older sediments of the upper cretaceous
           system appear, which could not be detected on the surface. Younger rocks
           of the fold-complex, as perm, are known neither in these mountains nor in
           the Hunge-steppe(Betpakdala). This led many research workers to believe
           that the mesozoic rocks of the Syr-Darja-lower course and the Turgay-val-
           ley are based on the palaeozoic complex. During the last years borings
           were carried out in the North and North-East of the station Tyuratam and
           to a great extent dislocated red and dark-grey argillites and sandstone
           were found. Gradient angles of 30-75° were observed. Neither microflora
           nor microfauna was found, a fact which complicated the determination of
           age. According to exterior features these strata are assumed to belong
           to cambrium, and the silurian age was assumed to be the latest. This was
           then brought forward as main argument for the hopelessness of finding
Card 1/3   oil in these regions. Madame Murakhovskaya, E.I., now herefrom isolated

On the Period of Settling of the Platform System
in the East of the Near-Aralian Region.   . PA - 2928

a spore-pollen-complex which is characteristic for upper trias sedi-
ments. According to their lithologic composition this stratum of trias.
rocks is subdivided into three suites(beginning at the bottom) — under
takyrsay, takyrsay and upper takyesay suite. From four models of the
under takyrsay suite spores and pollens are isolated and the motherplants
determined. Microscopic investigation disclosed some glauconite grains
were found which indicates the marine origin of these sediments. What we
have said before makes it possible to say that the geosynclinal regime
east of the Near-Aralian-Region existed up to the end of trias. The for-
mation of the structures of these regions was completed by the old cimmeri-
on folding phase. The development of a platform regime must be connected
with the end of the jura period. As for as the formation of the basic
structures of the folded fundament of the Eastern Aralian Region was com-
pleted towards the end of Trias it is probable that in the wide depressions
even in the Jura period a marine or lagoon regime could exist as the suc-
cessor of Trias. This circumstance increases the chances of finding oil
since it makes such horizons as the lower mesozoic era appear promising
for oil. (1 ill., 1table, 5 literature references).

Card 2/3

On the Period of Settling of the Platform System in the Era of the   PA - 2928
Near-Aralian-Region.

ASSOCIATION

PRESENTED BY
SUBMITTED
AVAILABLE
Card 3/3

Institute of Geological Sciences of the Academy of Science of the
Kazakh SSR,(Institut Geologicheskikh Nauk, SSR)
SATPAYEV, K.I., Member of the Academy.
5.3.1957.
Library of Congress.

VOSKOBOYNIKOV, M.Ye.; MARTYNOVA, M.Ya.

Stratigraphy of the Marine Paleogene in the Kzyl-Orda region. Izv.
AN Kazakh. SSR. Ser. geol. nauk no.5:60-62 '63.   (MIRA 17:1)

1. Institut geologicheskikh nauk AN KazSSR, Alma-Ata i Yuzhno-Kazakh-
stanskoye geologicheskoye upravleniye, Alma-Ata.

AUTHOR: Voskoboynikov, M. Ye.   2o-119-6-39/56

TITLE: The Position of Nummulitic Limestones in the Paleogene Cross Section of Northern Priaral'ye (Polozheniye nummulitovykh izvestnyakov v razreze paleogena Severnogo Priaral'ya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6, pp. 1191-1194 (USSR)

ABSTRACT: The investigations of the last years have shown that the frequently nummulite-bearing limestone horizon can be followed in the cross section of the marine Paleogene on the large territory from the Caspian Sea to the Prikaratauskiy district. (Table 1). It corresponds to the basin of the carbonate facies of the Eocene, which are relieved northwards by silicate facies (Ref. 5). Therefore it is very important for the right understanding of the Paleogene stratigraphy of the region mentioned in the title and of the neighboring regions to determine the position of nummulitic limestones and their interrelations with the layers lying below and above them. Some published

Card 1/3

The Position of Nummulitic Limestones in the
Paleogene Cross Section of Northern Priaral'ye   2o-119-6-39/56

data and critical considerations state the disagreement
of the researchers with regard to the age of individual
Paleogene horizons. Then follows a detailed description
(from bottom to top) of a cross section in the Ak-Kuurdan
defile. Based on this description and on that of the
neighboring regions (Ref. 3) the author made the following
conclusions: 1) The parcel of the quartz-glauconite-
-sands of the Akzharskaya suite cannot be a littoral fa-
cies of the Tasaranskaya suite but forms an independent
stratigraphic unity. It is older than the Lower Eocene
nummulitic limestones of the surroundings (Refs. 3, 4).
The nummulitic limestones (Tuguzskiy horizon) are not an
anticlinal facies of the Tasaranskaya suite, but they are
a quite independent stratigraphic unity. 3) The higher lying
brownish gray loams neither may be united with the quartz-
-glauconite-sands of the Akzharskaya suite to one suite nor
with the limestones mentioned under 2). They also form an
independent unity. By means of precising the position of
the nummulitic limestones the correlation of the strati-
graphic scheme of the Paleogene sediments of the northern
Priaral'ye with the neighboring regions (Table 1) was
rendered possible.

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The Position of Nummulitic Limestones in the
Paleogene Cross Section of Northern Priaral'ye   2o-119-6-39/56

There are 3 figures, 1 table and 7 references, 7 of which
are Soviet.

ASSOCIATION: Institut geologicheskikh nauk Akademii nauk KazSSR
(Institute of Geological Sciences AS Kazakh SSR)

PRESENTED: December 21, 1957, by K. I. Satpayev, Member, Academy
of Sciences, USSR

SUBMITTED: December 18, 1957

Card 3/3

VOSKOBOYNIKOV, M.Ye.

Triassic deposits in the lower Syr-Darya Valley. Vest. AN Kazakh.
SSR 14 no.8:73-77 Ag '58.
    (Syr Darya Valley--Geology, Stratigraphic)   (MIRA 11:10)

BAZHANOV, V.S.; VOSKOBOYNIKOV, M.Ye.; GLADKOV, I.I.; MNUSHKIN, L.B.

Stratigraphic position of recently found remains of marine mammals on the Mangyshlak Peninsula. Mat. po ist. fauny i flory Kazakh. 2:17-27 '58.

(MIRA 11:7)

(Mangyshlak Peninsula--Paleontology, Stratigraphic)

Translation from: Referatiynyy zhurnal, Geologiya, 1957, Nr 5, 15-57-5-6950D
                    p 176 (USSR)

AUTHOR: Voskoboynikov, M. Ye.

TITLE: Geological Structure of Southeastern Part of Aral-
             Kazalinsk Depression (Geologicheskoye stroyeniye yugo-
             vostochnoy chasti Aralo-Kazalinskoy vpadiny)

ABSTRACT: Bibliographic entry on the author's dissertation for
             the degree of Candidate of Geological and Mineralogical
             Sciences, presented to the In-t geol. nauk AN KazSSR
             (Institute of Geological Sciences of the AS Kazakhstan
             SSR), Alma-Ata, 1956.

ASSOCIATION: In-t geol. nauk AN KazSSR (Institute of Geological
             Sciences of the AS Kazakhstan SSR)

Card 1/1

VOSKOBOYNIKOV, M.Ye.

Position of nummulitic limestones in the profile of Paleogene
deposits in the northern part of the Aral Sea region. Dokl. AN
SSSR 119 no.6:1191-1194 Ap '58.
                                                    (MIRA 11:6)

1. Institut geologicheskikh nauk AN KazSSR. Predstavleno akademikom
K.I. Satpayevym.

                  (Aral Sea region—limestone)

BATTALOVA, Sh.; VOSKOBOYNIKOV, M.Ye.; LIKEROVA, A.A.

Bentonites of the Mangyshlak Peninsula. Vest. AN Kazakh. SSR 18 no.10:35-44 O '62.

(MIRA 17:9)

VOSKOBOYNIK, N.I.

Speed of electric logging in complex measurements taken at definite time intervals. Prikl. geofiz. no.23:202-216 '59.

(Logging (Geology))   (MIRA 13:1)

VOSKOBOYNIK, N. I.

"Testing Logging Cables"

Prikladnaya geofizika; sobornik statey, vyp. 21 (Applied Geophysics; Collection of Articles, Nr 21) Moscow, Gostoptekhizdat, 1958. 221 p.

Animals - General Problems.

Q-1

Abs Jour   : Ref Zhur - Biol., No 7, 1958, 30901

Author   : Shain S.S., Voskoboynikova N.A.
Inst   : -
Title   : The Nutritiousness of Red Clover Hay and of the Clover-Timothy Grass-Mixture. (Pitatel'nost' sena klevera krasnogo i klevero-timofeychnoy travosmesi).

Orig Pub   : Zhivotnovodstvo, 1957, No 4, 56-59.

Abstract   : The profitableness of sowing the clover-timothy mixture, as compared with the sowing of pure clover and timothy, is pointed out. The crop of the hay of the clover-timothy mixture surpassed the crop of the clover hay (from the same area) as to feed units, by 76%, and as to digestible protein, almost by 40%.

Card 1/1

- 8 -

16.7800, 24.6000

AUTHOR:

Voskoboynikov, G. M.

77334
SOV/57-30-1-13/18

TITLE:

Accuracy and Limits of Application of the Diffusion Approximation to the Solution of γ-Rays Propagation Problems

PERIODICAL:

Zhurnal tekhnicheskoy fiziki, 1960, Vol 30, Nr 1, pp 90-95 (USSR)

ABSTRACT:

Recently Dyad'kin (Izv. AN SSSR, ser. geofiz., Nr 4, 1955), the author (Izv. AN SSSR, ser. geofiz., Nr 3, 1957), and Novozhilov (ZhTF, 33, 1287, 1957) discussed an approximate method for calculating the propagation of γ-rays in uniform media representing the multiple scattering of relatively soft γ-quanta as a diffusion of disordered particles satisfying the condition

$$S = -D \operatorname{grad} n, \qquad (1)$$

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Accuracy and Limits of Application of
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where S - intensity of the flow of quanta; n - distri-
bution density; D - coefficient of diffusion. Depend-
ing on the manner one averages the mean paths and life-
times of quanta, Eq. (1) can be used for investiga-
tions of the spectral composition of the scattered
radiations or for investigations of integral (over
energies) space density of the distribution of quanta.
To apply this simple diffusion approach, it is suffi-
cient that conditions be satisfied

$$k_1 \gg 1; \quad r \gg \frac{1}{\sigma_1}; \quad \sigma_1 \gg \tau_{1,} \tag{2}$$

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where k_1 - initial wave length of quanta (in Compton
units); r - distance from the source of radiation;
σ_1 and τ - respective coefficients of Compton

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interactions and photoabsorption for quanta of wave-
length k_1. These conditions limit very much the
region of applicability of the method. On the other
hand, the author believed that the character of γ -
ray interaction with matter leads one to expect that
the Eq. (1) and consequently the diffusion method
should be valid in a much larger region. To check
this assumption experimentally, the author compared
his experimental data with theoretical computations
for radiations by Hg^{203}(k_1 = 1.82) and Co^{60}(mean k_1 =
= 0.41) in water and sand with small additions of
lead. 1. Experimental Setup and Procedures.
Materials described in Table 1 were placed in a
cylindrical container with a 40 cm diameter and 60 cm
high. k_2 is the limiting wavelength value of the
spectrum of scattered waves. An aluminum tube 30 mm
in diameter and 1.5 mm wall thickness was used in the

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Table 1. Characteristics of scattering media. (a)
Serial number of the medium; (b) composition; (c)
basic component; (d) addition of lead, %; (e) density,
gm/cm3; (f) wet quartz sand; (g) same; (h) water.

(a)	(b)		(e.)	k_t
	(c)	(d)		
1	(f)	0	1.63	7.46
2	(g)	0.5	1.61	6.16
3	(g)	1.50	1.65	4.87
4	(h)	0	1	11.92
5	(g)	0.50	1.005	8.92
6	(g)	1.31	1.013	5.46

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Accuracy and Limits of Application of
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center as container of probes. The probe consisted
of a thick lead cylinder screen fitting the aluminum
tube and having at the bottom an approximately 2 mCurie
Hg^{203} or 0.3 mCurie Co^{60}. On the upper side of the
screen were located gaseous discharge tungsten
γ-counters. Distance between the source and the
center of the counter could be varied between 21 and
43 cm. The center of the counter cathode was always
located 10 cm under the surface of the scattering
medium. Statistical errors were less than 2%. The
author made sure that the introduction of the probe
does not significantly distort the true value of the
measured quantities. He also assumed that the counters
will give counts proportional to the number of incom-
ing photos until the K-photoabsorption limit of tung-
sten is reached. For rays containing intensive com-
ponents of wavelengths larger than 7.4, one can expect
a disagreement between theoretical and experimental
data. 2. Evaluation of Results. At distance r from a

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monochromatic point source of strength Q in a uniform
medium of density ρ, the intensity of γ-radiation
is given in the diffusion approximation by the equation:

$$I = \frac{m}{r} e^{-qr},$$

where

$$(3)$$

$$m = \frac{Q}{4\pi} \frac{3(k_2 - k_1)}{\lambda},$$

$$(4)$$

$$q = \frac{\sqrt{3(k_2 - k_1)}}{\lambda_?},$$

$$(5)$$

k_1 - wavelength of primary rays; k_2 - mean wavelength
at which the photoabsorption of multiple reflected
quanta occurs, and determined from

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$$\int_{k_1}^{k_2} \frac{\tau}{\sigma(1-t)} dk = 1,$$

$$\lambda = \int_{k_1}^{k_2} \frac{dk}{\sigma(1-t)}$$

- mean full path length of quanta in the medium until
the moment of absorption; $\bar{t}$ - mean cosine of the
scattering angle; σ and τ - respective Compton
scattering and photoabsorption coefficients, expressed
as functions of k. On Figures 1 and 2 are experimental
results (full lines) for media numbered in Table 1.
Dashed lines are the corresponding theoretical curves.
Table 2 and 3 contain the comparison of measured and

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Accuracy and Limits of Application of
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Solution of γ-Rays Propagation
Problems

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SOV/57-30-1-13/18
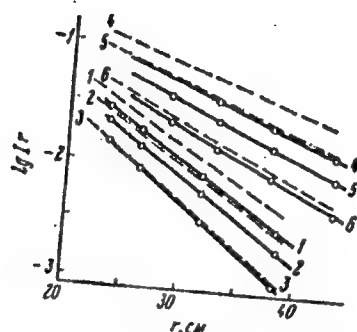
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Fig. 1. Decrease of scattered γ-radiation
intensities Hg^{203}.

Accuracy and Limits of Application of
the Diffusion Approximation to the
Solution of γ-Rays Propagation
Problems
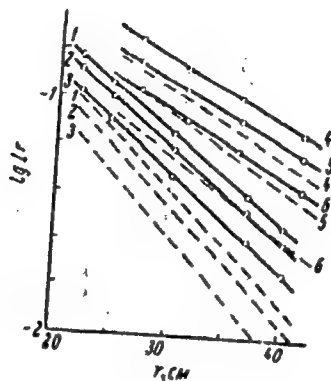
77334
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Fig. 2. Decrease of scattered γ-radiation
intensities Co^{60}.

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Accuracy and Limits of Application of
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computed parameters m, q, and Δ q, the difference in
q between its value for pure sand and the scatterer
in question. The author explains changes in the above
parameters by (a) the effects of the 4 mm Fe filter
used when measuring scattering by water and (b) by
the influence of the changes of the average atomic
number due to the added Pb on the value of k_2, and
therefore, on the sensitivity of the counter. Con-
clusions. 1. Diffusion approximation can be used for
not exact computations of the integral intensity of
the soft γ-radiations with initial wavelengths of
the order of 2 Compton units and at distances larger
than two free path length of the quanta. 2. The
analytical form of the intensity vs. distance rela-
tionship and other features characterising the diffu-
sion process are preserved even in case of fairly hard
radiation ($k_1 \geq 0.41$). The diffusion method can be
used in this region for qualitative investigations of

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Table 2. Parameters of Diffusion γ-quanta of Hg^{203} (a) Serial number of the medium; (b) experimental; (c) theoretical.

(a)	m		$q \cdot 10^9$		$\Delta q \cdot 10^9$	
	(b)	(c)	(b)	(c)	(b)	(c)
1	1	1	9.35	8.76	0	0
2	0.98	0.94	10.11	9.51	+0.76	+0.75
3	1.05	0.91	11.07	10.71	+1.72	+1.95
4	0.77	0.76	9.44	8.10	+0.09	−0.66
5	0.68	0.71	10.17	9.07	+0.82	+0.31
6	0.61	0.63	11.39	11.29	+2.04	+2.53

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Table 3.   Parameters of Diffusion γ-quanta Co^{60}. (a) Serial number of the medium; (b) experimental; (c) theoretical.

(a)	m		$q \cdot 10^3$		$\Delta q \cdot 10^3$	
	(b)	(c)	(b)	(c)	(b)	(c)
1	1	1	5.36	6.54	0	0
2	0.95	0.92	5.63	6.77	+0.27	+0.23
3	0.84	0.87	5.75	7.08	+0.39	+0.54
4	0.90	0.79	6.01	6.58	+0.65	-0.01
5	0.71	0.72	5.90	7.00	+0.54	+0.46
6	0.62	0.60	6.35	7.72	+0.99	+1.18

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Accuracy and Limits of Application of
the Diffusion Approximation to the
Solution of γ-Rays Propagation   77334
Problems   SOV/57-30-1-13/18

γ-ray propagation under condition of geometry not
allowing an exact calculation using exact methods.
There are 2 figures; 3 tables; and 5 references, 4
Soviet, 1 French.

ASSOCIATION: Ural' Branch AS USSR, Institute of Geophysics) (Ural'skiy
               filial AN SSSR, Institut geofiziki)

SUBMITTED: February 20, 1958

Card 13/13

TIKHOMIROV, V.V.; VOSKRESENSKAYA, N.A.

Memorable dates for November-December, 1963. Sov. geol. 7
no.1:142-150 Ja '64.
(MIRA 17:6)

1. Geologicheskiy institut AN SSSR.

VOSKOBOYNIKOV, N.P., [deceased] dotsent; KUZ'MIN, F.F., kandidat tekhni-
cheskikh nauk; SAVIN, M.M., starshiy prepodavatel'.

Designing cylindrical pitch gears cut by standard hobbing cut-
ters. Nauch.trudy MPI 30(44):53-61 '55.   (MLRA 9:11)
          (Gear cutting)

~~~~~~~~~~~~, N.G., insh.; LEVIN, S.I., insh.

Lighter block and tackle. Mlek. sta. 29 no.2:84 F '58.   (MIRA 11:3)
(Hoisting machinery)

Voskoboynikov, S. I.

"The magnetostriction of ternary alloys of iron-nickel-cobalt."
Min Education RSFSR. Moscow State Pedagogical Inst imeni V. I.
Lenin. Moscow, 1956 (Dissertation for the degree of Candidate in
Physicomathematical Science)

Knizhnaya letopis'
No. 25, 1956. Moscow

AUTHOR: Voskoboynikov, S.I.

TITLE: SOV-115-58-4-25/45

A Highly-Sensitive Method of Measuring Magnetostriction
(Vysokochuvstvitel'nyy metod izmereniya magnitostriktsii)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 4, pp 59-61   (USSR)

ABSTRACT: Kornetskiy /Ref. 1/ and Selisskiy /Ref. 2/ have devised a
highly sensitive optico-mechanical method of measuring
magnetostriction. The method described in the article is
a development of this, devised by the author in TsNIIChERMET,
and differing from the former in that it consists of a
double Class II lever, the end of which turns a needle
with a small mirror (Figure 2). The construction and
operation of the magnetostriction gage is described and
compared with the Kornetskiy-Selisskiy device. It is su-
perior by having: a constant amplification, independent

Card 1/2

A Highly-Sensitive Method of Measuring Magnetostriction   SOV-115-58-4-25/45

of the position of the light indicator, greater sensitivity
and the ability to measure both longitudinal and transverse
magnetostriction. Its maximum relative measurement error is
4% for longitudinal and 5% for transverse measurement.
There are 2 diagrams, 1 graph and 3 references, 2 of which
are Soviet and 1 German.

1. Magnetostriction--Measurement

Card 2/2

AUTHOR: Voskoboynikov, S. I.

SOV/126-6-6-7/25

TITLE: Magnetostriction and Magnetization of Ternary Iron-Nickel-Cobalt Alloys with Iron-Nickel and Iron-Cobalt Bases (Magnitostriktsiya i namagnichennost' troynykh splavov zhelezo-nikel'-kobal't na zhelezonikelevoy i zhelezokobal't-ovoy osnovakh)

PERIODICAL: Fizika metallov i metallovedeniye, 1958, Vol 6, Nr 6, pp 1011-1016 (USSR)

ABSTRACT: The present paper reports the results of investigation of magnetostriction and magnetization of ternary iron-nickel-cobalt alloys of compositions which were not studied so far but which are important in practical applications of these alloys. Magnetostriction was measured by means of an optical-mechanical system. This system uses a double lever and was developed by the author at the Institute of Precision Alloys of the Central Scientific-Research Institute for Ferrous Metals (TsNIIChERMET). The apparatus is shown in Fig.1. Changes in the length of sample 1 on magnetization are transmitted to the driving lever I of length b . One end of the lever I is fixed and at a distance a from this fixed point the lever I and the sample 1 are coupled mechanically at a point A . The other end of the driving lever I is attached rigidly to

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Magnetostriction and Magnetization of Ternary Iron-Nickel-Cobalt Alloys with Iron-Nickel and Iron-Cobalt Bases

a driven lever II of length d at a distance c from the fixed end of the driven lever. The free end of the driven lever II rotates a shaft 2 which has a small mirror 4 attached to it. A ray of light is sent out by a source 3 and is reflected by the mirror 4 on to a scale 5. Magnification produced by this system is given by $K = 2iR/D$, where $i = bd/ac$, D is the diameter of the shaft to which the mirror 4 is attached and R is the distance between the scale and the mirror. In the apparatus used by the author, $i = 25$, $D = 0.5$ mm and $R = 1000$ mm. Under such conditions the value of the magnification K is equal to 100 000. Calibration of the apparatus using nickel showed that a displacement of 1 mm on the scale corresponded to a change of length of the sample by 1.01×10^{-6} cm. Samples were magnetized in a solenoid and their magnetization was measured by means of a ballistic galvanometer. Two series of iron-nickel-cobalt alloys were prepared. Technically pure iron, electrolytic nickel and electrolytic cobalt were melted

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Magnetostriction and Magnetization of Ternary Iron-Nickel-Cobalt Alloys with Iron-Nickel and Iron-Cobalt Bases

together in a high-frequency induction furnace. The melt was poured out to form sheets of 120 x 60 x 10 mm size. Samples were prepared by rolling of these sheets down to 3 mm thickness. The samples themselves were in the form of strips 110 mm long and 3 mm wide. They were annealed in an atmosphere of hydrogen for 6 hours at 1100° C with subsequent cooling in air. The final thermal treatment was carried out in a Silit furnace in 10^{-3} mm Hg vacuum; it consisted of heating to 1100°C for 3 hours with gradual cooling to 200°C in steps of 50°C (3 hours in each step) and final cooling to room temperature. The chemical composition of the alloys is given in a table on p 1012. Values of the longitudinal and transverse magnetostriction at saturation $\lambda_{\parallel}$ and $\lambda_{\perp}$ were determined from curves $\lambda_{\parallel}(H)$ and $\lambda_{\perp}(H)$ by extrapolation of the linear parts of the curves to the λ-axis (Figs.3a, 4a and 5a) and are given in the table on p 1012. Fig.2 shows longitudinal and transverse magnetostriction plotted in a corner of the Fe-Ni-Co phase triangle. At various points in this triangle, corresponding to the compositions of the alloys the magnetostriction values are given in the form of vertical

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Magnetostriction and Magnetization of Ternary Iron-Nickel-Cobalt SOV/126-6-6-7/25
Alloys with Iron-Nickel and Iron-Cobalt Bases

lines. The lengths of these lines above each point represent
the longitudinal magnetostriction and the lengths below the
point represent the transverse magnetostriction. On the sides
of this triangle the author plotted also some values of
magnetostriction at saturation of binary iron-nickel and
iron-cobalt alloys taken from the work of Masiyama (Ref.1)
and Shul'tse (Schultze) (Ref.2). The table on p 1012 gives
also the values of the saturation magnetization I_s , as
well as the values of $\lambda_u = 2(\lambda_{\parallel} - \lambda_{\perp})/3$ and $R = \lambda_{\parallel} - \lambda_u$.
When $R = 0$ magnetic texture and volume (bulk) magneto-
striction are absent. When R is positive bulk magneto-
striction occurs on magnetization, while negative R signifies
magnetic texture in the direction of measurement. The table
on p 1012 shows that in the α-phase region of alloys with
iron-cobalt base, containing up to 30% of cobalt (samples
1-6), the bulk magnetostriction is small and the "second rule
of even effects" is obeyed approximately. In alloys in the

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Magnetostriction and Magnetization of Ternary Iron-Nickel-Cobalt
Alloys with Iron-Nickel and Iron-Cobalt Bases

same region but with more than 30% cobalt (samples 7-12),
considerable bulk magnetostriction occurs on magnetization.
In transition $(\alpha + \gamma)$ alloys, large changes in volume on
magnetization occur in samples of alloys 15 and 20. Similar
large volume changes occur in γ-phase permalloy-type alloys
26-27. Magnetic texture is present in alloys 9, 22, 25 and
28. From $\lambda_{||}(H)$ and $\lambda_{\perp}(H)$ curves two further types of

curves were constructed: magnetization as a function of
magnetostriction $I(\lambda)$ and magnetostriction as a function
of the square of magnetization $\lambda(I^2)$. Typical $I(\lambda)$ and
$\lambda(I^2)$ curves are shown in Figs.3, 4 and 5. Presence of
magnetic texture in the initial magnetic state of a sample
may be deduced from $I(\lambda)$ curves. For example, the $I(\lambda)$
curve in Fig.46 for the alloy 28 shows that on magnetization
of the latter to above 500 gauss, its magnetostriction is
equal to 0 , which indicates the presence of magnetic
texture. Figs.46 and 56 show that the shape of the $I(\lambda)$
curves is not the same for all alloys. One type of the
$I(\lambda)$ curves, shown in Fig.46, is characterised by increase
Card 5/7 of magnetization up to a certain value above which it does

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Magnetostriction and Magnetization of Ternary Iron-Nickel-Cobalt
Alloys with Iron-Nickel and Iron-Cobalt Bases

not depend on magnetostriction. This type of curve occurs
in alloys in which volume changes are observed on magnetiza-
tion. The second type of $I(\lambda)$ curves, as shown in Fig.5ξ,
is characterised by increase of magnetostriction with mag-
netization up to a certain value of the latter, above which
it is independent of magnetization. Such curves occur in
α-phase alloys, whose volume change on magnetization is small
and for which the "second rule of even effects" is valid. The
$\lambda(I^2)$ curves make it possible to find the values of magneto-
striction constants λ_{100} in the $[100]$ direction in mono-

crystals, using Akulov and Kondorskiy's formula (Ref.3):

$$\lambda = (3/5)\lambda_{100}(I/I_s)^2 \quad . \quad \text{When this formula is used}$$

for an alloy with 1.2% nickel, 25.6% cobalt and 73.2% iron
(alloy Nr 3), the value of the magnetostriction constant was
found to be $\lambda_{100} = 53.5 \times 10^{-6}$ compared with the longitudinal

Card 6/7

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Magnetostriction and Magnetization of Ternary Iron-Nickel-Cobalt
Alloys with Iron-Nickel and Iron-Cobalt Bases

magnetostriction of polycrystal samples $\lambda_{\parallel} = 32.2 \times 10^{-6}$.

This means that if an alloy is produced with the texture
oriented along the [100] axis, magnetostriction can be in-
creased by a factor of 1.5. Such a method of increasing
magnetostriction was developed by Bryukhatov (Ref.4) for
nickel and by Nesbitt (Ref.5) for an iron-cobalt alloy, 30%
of iron. There are 5 figures, 1 table and 5 references, 3 of
which are Soviet, 1 Japanese and 1 English.

ASSOCIATION: Moskovskiy institut inzhenerov zheleznodorozhnogo
transporta (Moscow Institute of Railway Transport Engineers)

SUBMITTED: May 28, 1957.

Card 7/7

ARUTYUNOV, N.B., inzh., red.; VOSKOBOYNIKOV, V.G., doktor tekhn. nauk, red.; GOTLIB, A.D., prof., doktor tekhn.nauk, red.; GUSOVSKIY, A.A., inzh., red.; KRASAVTSEV, N.I., kand. tekhn. nauk, red.; NEKRASOV, Z.I., akademik, red.; OSTROUKHOV, M.Ya., kand. tekhn. nauk, red.; POKHVISNEV, A.N., prof., doktor tekhn.nauk, red.; RAMM, A.N., prof., doktor tekhn. nauk, red.; TSYLEV, L.M., prof., doktor tekhn. nauk, red.; POZDNYAKOV, G.L., red. izd-va; ISLENT!YEVA, P.G., tekhn. red.

[Blast furnace process according to most recent developments; on the 100th. anniversary of Academician M.A.Pavlov's birth] Domennyi protsess po noveishim issledovaniiam; k 100-letiiu so dnia rozhdeniia akad. M.A.Pavlova. Moskva, Metallurgizdat, 1963. 325 p.   (MIRA 16:8)

1. AN Ukr.SSR (for Nekrasov).
    (Blast furnaces)
    (Pavlov, Mikhail Aleksandrovich, 1863-1958)

Change in iron ore composition on concentration. V. G. Voskobojnikov. *Stal* 6, 631-6(1946).—In concg. iron ores it is essential to know what changes occur in the compn. of the alloying elements as well as in the gang components. The latter is important because in smelting the concentrate it may become necessary to correct the slag compn. Improper compns. of the gang may increase the fuel requirements. From a vast no. of steel-mill and concn.-plant analyses, expressions were derived for the relation between the Fe content of an ore and the quantity and compn. of the gang. A similar expression was also derived for V in the ore. These relations hold for 3 Ural Fe ores. The V content in a concentrate is calcd. from $V = 0.005 Fe + 0.08$ and the total gang, $Z_g = 98 - 1.37 Fe$. The compn. of the gang is read from a graph.

M. Hoseh

C A

The isoviscous temperatures and the content of heat of blast-furnace slags at these temperatures. V. O. Vedeneikov. *Teoriya Prakt. Met.* 12, No. 8, 11–16(1940).— The object of the expts. was to det. the heat content of blast-furnace slags at temps. of their "normal" η. For this purpose 58 slags were used which contained besides SiO_2, Al_2O_3 and CaO also MgO 0.9–2.0, MnO 0.1–0.4, FeO 0.15–0.35 and S 2–3%. Diagrams were constructed for temps. at which the slags have η of 5, 7 and 10 poises. For simplicity FeO, MgO and MnO were excluded from the total analyses and S was left in the free state, i.e., the sum $SiO_2 + Al_2O_3 + CaO$ was taken as 100. The heat quantities of slags of various compns. at η of 20 poises, 5 poises and at the m. p., are, resp.: for SiO_2 27, Al_2O_3 25, and CaO 48%, 440, 407 and 458 cal.; for SiO_2 48, Al_2O_3 10, and CaO 42%, 373, 443 and 410 cal.; for SiO_2 54, Al_2O_3 15, and CaO 21%, 485, >490 and 300 cal.; for SiO_2 41, Al_2O_3 29, and CaO 30%, 390, 478 and 350; for SiO_2 40, Al_2O_3 25, and CaO 35%, 422, 480 and 364 cal.; for SiO_2 40, Al_2O_3 35, and CaO 25%, 400, 458 and 440 cal.; for SiO_2 50, Al_2O_3 10, and CaO 40%, 405, 432 and 405 cal.; for SiO_2 30, Al_2O_3 35, and CaO 35%, 438, 492 and 438 cal.; for SiO_2 35, Al_2O_3 10, and CaO 55%, 488, 474 and >500. For optimum results pig iron produced with coke should possess the min. temp. of the "normal" η and a min. heat content at this temp. (390–5 cal.). Increasing the SiO_2 content to 45–6% (at a const. alumina content of 7–10%) produces slags of comparatively low heat capacities and low isoviscous temps. Slags produced with charcoal and contg. SiO_2 55 and Al_2O_3 10%, SiO_2 55 and Al_2O_3 18%, SiO_2 47 and Al_2O_3 23% melt at low temps. according to Akerman (heat capacity 350–80 cal.), but according to V. they require even more heat to attain the required η (approx. 20 poises) than do the slags produced with coke. Their heat capacity is 440–60 cal. at $\eta = 20$ poises. Twenty references.

W. R. Henn

PROCESSES AND PROPERTIES INDEX

The heat capacity of blast-furnace slags at high temperatures. V. O. Voskobóinikov. *Teoriya Prakt. Met.* 12, No. 10, 3-6(1940).—Studies were made on 102 seven-component slags with varying contents of SiO_2, Al_2O_3 and CaO and with const. contents of MgO, MnO, FeO and S. The relation of the av. heat capacity of slags to the temp. and the chem. compn. can be expressed by empirical equations: for temps. of 20-1350°, $C_{la} = 0.169 + 0.201 \times 10^{-4} t - 0.277 \times 10^{-4} t^2 + 0.130 \times 10^{-4} t^3 + 0.17 \times 10^{-4} (1 - (CaO/\Sigma_{oxides}))$; for temps. of 1350-1600°, $C_{la} = 0.15 \times 10^{-4} t - 0.478 \times 10^{-4} t^2 - 0.878 + 0.016 (1 - (CaO/\Sigma_{oxides}))$. Σ_{oxides} is the sum $SiO_2 + Al_2O_3 + MgO + FeO + MnO$ in the slag. In the temp. interval 800-1250° the exptl. values of the heat capacities of various slags deviate sometimes from the calcd. values; slags with the same CaO/Σ_{oxides} values can have different heat capacities. This is attributed to the fact that the character of the heat-capacity changes of the slags is detd. not only by their compn., but also by the relation between the amt. of the liquid and cryst. phases and by other physical factors. At higher and lower temps. the heat capacities of slags at a const. temp. depend mainly on their chem. compn. Six references.

W. R. Henn

METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Experimental agglomeration of Krivorog ores. G. I. Demin and V. G. Voskoboinikov, *Tsvetn. i Prakt. Met.* No. 6, 54-60(1937); cf. preceding abstr.– Agglomeration was conducted with the chief types of Krivorog ores. Compn. varied as follows: SiO_2 2.08-25.08, FeO 0.15-1.27, Fe_2O_3 71.58-91.20%. Screen test showed: 0.00-0.18 mm. 34.5-49.0%, 0.18-0.49 mm. 7.8-27.0%, 0.49-5 mm. 19.5-43.5%. Breeze was 0-2.5 mm. Expts. show that to obtain good results the charge should have 4-6% water for rich ores and 6-9% for poor ores. Yield of agglomerates over 5 mm. was 80-90%; the product was sufficiently strong and porous. Lower mech. properties were obtained from ores of 14% or more SiO_2. The production of normal agglomerate corresponds to content of 20-25% FeO in product. Expts. with rich and poor ore mixts. gave pos. results. Mixt. of both should contain about 10% SiO_2.   B. Z. Kanish

A S M · S L A   METALLURGICAL LITERATURE CLASSIFICATION

VOSKOBOYNIKOV, V. G.

Voskoboynikov, V. G. "The reduction smelting of sulfur", Trudy Tsentr. nauch-issled, in-ta chernoy metallurgii, Issue 1, 1948, p. 5-46, - Bibliog: 33 items.

SO: U-2888, 12 Feb. 53, (Letopis' Zhurnal 'nykh Statey, No. 2, 1949).

VOSKOBOYNIKOV, V.G.-

VOSKOBOYNIKOV, V.G.--"Sulfur in Domestic Industry." Dr Tech Sci, Inst of Metallurgy imeni A.A. Baykov, Acad Sci USSR, 28 Jan 54. (VECHERNAYYA MOSKVA, 19 Jan 54)

Source: SUM 168, 22 July 1954

VOSKOBOYNIKOV, V.G.; KHROMOV, V.A.; REBEKO, A.F.; MKRTCHAN, L.S.; MITSKEVICH, O.V.; BIRMAN, A.I.

Mathematical analysis of certain design parameters of thermal conditions of the blast furnace process. [Sbor. trud.] TSNIICHM (MIRA 17:4) no.29:9-23 '63.

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Voskoboynikov, Khromov, Rebeko, Mkrtchan). 2. TSentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii (for Mitskevich, Birman).

VOSKOBOYNIKOV, V.G., doktor tekhnicheskikh nauk.

Use of oxygen in steel smelting. Sbor.trud.TSNIICHM no.13:12-17 '56.
(MLRA 9:11)

(Oxygen--Industrial applications)
(Steel--Metallurgy)

VOSKcBcv)·REV, V·G·

SAMARIN, A.M., otvetstvennyy redaktor; TSYLEV, L.M., professor, doktor, redaktor; VOSKOBOYNIKOV, V.G., doktor tekhnicheskikh nauk, redaktor; OSTROUKHOV, N.Ya., kandidat tekhnicheskikh nauk, redaktor; CHERNOV, A.N., redaktor izdatel'stva; KISELEVA, A.A., tekhnicheskiy redaktor

[Investigation of blast furnace processes] Issledovanie domennogo protsessa. Moskva, 1957. 255 p.   (MIRA 10:4)

1. Akademiya nauk SSSR. Institut metallurgii.
2. Chlen-korrespondent AN SSSR (for Samarin)
                    (Blast furnaces)

VOSKOBOYNIKOV, V.G.

137-1958-1-202

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 32 (USSR)

AUTHORS: Voskoboynikov, V.G.,   Adabash'yan, A.K.

TITLE: Prospects of Development of Automation in Blast-furnace, Steel-smelting and Rolling Operations, and the Problems Before Science in Connection Therewith (Perspektivy razvitiya avtomatizatsii domennogo staleplavil'nogo i prokatnogo proizvodstv i zadachi nauki)

PERIODICAL: V sb.: Sessiya AN SSSR po nauchn. probl. avtomatiz. proiz-va. Kompleksn. avtomatiz. proizv. protsessov. Moscow, AN SSSR, 1957, pp 122-138

ABSTRACT: The need for automatic control of open-hearth furnaces, and for overall process-control mechanization and automation of rolling mill operations is indicated. It is also necessary to proceed toward the overall process-control automation of control of blast furnaces. The basic and essential problems involved in further process-control automation are posed for each of these primary fields of iron and steel production. The unsatisfactory organization of the investigations and planning operations now under way is noted, as is the need to elaborate new continuous

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137-1958-1-202

Prospects of Development of Automation in Blast-furnace, (cont.)

technological processes susceptible to automatic overall-process control.

M. L.

1. Open hearth furnaces--Automation   2. Blast furnaces--Automation   3. Rolling mills--Automation   4. Steel industry--Equipment--USSR

Card 2/2

,VOSKOBOYNIKOV, V. G.

137-58-5-9026

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 40 (USSR)

AUTHORS: Voskoboynikov, V.G., Goloskov, B.V.

TITLE: Desulfurization of Pig Iron With Magnesium (K voprosu ob obes-
             serivanii chuguna magniyem)

PERIODICAL: Sb. tr. Mosk. vech. metallurg. in-t, 1957, Nr 2, pp 40-52

ABSTRACT: Metallic Mg (MM) has been initially employed in foundries as
              a modifier which spheroidized the graphite contained in pig iron;
              more recently it has been employed as a desulfurizing agent.
              Attempts to utilize MM for desulfurization purposes have usually
              failed: after desulfurized pig iron had been subjected to blowing
              in a Bessemer converter, or after it had been reduced in an
              electric furnace, the amount of S contained in the metal was
              found to be greater than it had been in the original pig iron. This
              was explained by the fact that, instead of removing the S, the
              MM caused it to form chemical compounds in which the S could
              not be determined by means of standard chemical analysis meth-
              ods. The success of the Kanash plant in producing Bessemer
              steel with low S content from desulfurized pig iron was the
Card 1/2   reason for a special investigation ordered by the TsNIIChM.

137-58-5-9026

Desulfurization of Pig Iron With Magnesium

Addition of 0.3-0.35% Mg under laboratory conditions did not produce any supporting results, although a high degree of desulfurization was observed in individual experiments. Shop experiments employing radioactive tracers have shown that the Mg treatment of pig iron will reduce its S content by 65-70% on the average. Negative results obtained are explained by the difficulties connected with the removal of the slag which consists of MgS and forms a pulp-like mass mixed with pig iron, on the surface of the metal after the pig iron had been desulfurized; as a result of this condition, the S contained in the fraction of slag which had not been removed, re-enters the metal during the blowing process. The Kanash plant achieves its low-sulfur converter steel by employing effective methods of slag removal.

M. O.

1. Iron--Desulfurization   2. Magnesium--Applications

Card 2/2

VOSKOBOYNIKOV, V. G. (Dr. Tech. Sci.); ADABASH'YAN, A. K. (Eng.)

    "Trends of Development of Automation of Blast Furnace, Steel Melting and Rolling Production and Problems of Science,"

paper read at the Session of the Acad. Sci. USSR, on Scientific Problems of Automatic Production, 15-20 October 1956.
Avtomatika i telemekhanika, No. 2, p. 182-192, 1957.

9015229

MANTSEV, R.M.; GUBERT, S.V.; CHARIKHOV, L.A.; VOSKOBOYNIKOV, V.G.; STOSHA,
       Ye.A.

       For an overall mechanization and a widespread automation in metallurgy.
       Metallurg 9 no.6:1-3 Je '64.   (MIRA 17:9)

       1. Direktor Gosudarstvennogo soyuznogo instituta po proyektirovaniyu
       agregatov staleliteynogo i prokatnogo proizvodstva dlya chernoy metal-
       lurgii (for Mantsev). 2. Direktor Gosudarstvennogo soyuznogo instituta
       po proyektirovaniyu metallurgicheskikh zavodov (for Gubert). 3. Glavnyy
       inzh. TSentral'noy laboratorii avtomatiki (for Charikhov). 4. Zamestitel'
       direktor Instituta novoy metallurgicheskoy tekhniki TSentral'nogo nauchno-
       issledovatel'skogo instituta chernoy metallurgii im. I.P. Bardina (for
       Voskoboynikov) 5. Zamestitel' direktora Vsesoyuznogo nauchno-issledovatel'-
       skogo i proyektnokonstruktorskogo instituta metallurgicheskogo mashino-
       stroyeniya (for Stosha).

VOSKOBOYNIKOV, V.G., prof., doktor tekhn. nauk; ZHEREBIN, B.N., prof.;
LIKHODIYEVSKIY, V.A., inzh.; MISHIN, P.P., inzh.; RAYEV, Yu.O., inzh.

Dynamics and control of coke burning processes in the tuyere zone
of a blast furnace. Stal' 24 no.11:975-980 N '64.

(MIRA 18:1)

VOSKOBOYNIKOV, V. G.

USSR

Ye. I. ASTROV(fnu), Central Research Institue of Iron and Steel [possibly the Central Scientific Research Institute of Ferrous Metallurgy] [Possibly Ye. I. ASTROV who was Head, Central Laboratory - Metallographic Laboratory, Gorkiy Metallurgical Plant, in 1960) - "Continous casting - present and future prospects"

MIKHALEVICH, Georgiy, ECE Steel and Engineering Section - "Standard and modern steelmaking." Based mainly on information developed for the ECE study, "Comparison of steel-making processes," which will be distributed at the opening meeting.

RUDKON, A. K., Chief Engineer, Steel Plant imeni F. E. Dzerzhinskiy - "Sintering practice on a large-scale"

VOSKOBOYNIKOV, V. G., Central Research Institute of Iron and Steel [possibly the Central Scientific Research Institute of Ferrous Metallurgy] - "Developments at the blast furnace - top pressure, sinter practice, hydro-carbon injection, oxygen"

report to be presented at the Inter-regional Symposium on Iron and Steel in Developing Countries, United Nations Economic and Social Council (ECOSOC), Prague Czechoslovakia, 11-16 Nov 1963.

GOL'DSHTEYN, Nison L'vovich; VOSKOBOYNIKOV, V.G., prof., doktor tekhn.
nauk, retsenzent; NEKRASOV, N.K., dots., kand. tekhn. nauk, re-
tsenzent; VATOLIN, N.A., kand. tekhn. nauk, retsenzent;
LEPINSKIKH, B.M., retsenzent; POPEL', S.I., prof. doktor tekhn.
nauk, red.; BUR'KOV, M.M., red. izd-va; TURKINA, Ye.D., tekhn.
red.

[Short course on the theory of metallurgical processes] Kratkii
kurs teorii metallurgicheskikh protsessov. Sverdlovsk, Gos.
nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
1961. 334 p.   (MIRA 15:2)
        (Metallurgy)

VOSKOBOYNIKOV, V. G.

PHASE I BOOK EXPLOITATION SOV/2728

Akademiya nauk SSSR. Institut metallurgii.

Sovremennyye problemy metallurgii (Modern Problems in Metallurgy) Moscow, Izd-vo AN SSSR, 1958. 640 p. 3,000 copies printed.

Resp. Ed.: A.M. Samarin, Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: V.J. Rabovskiy; and A.I. Demsey; Tech. Ed.: T.V. Polyakova.

PURPOSE: This book is intended for scientific and technical personnel in the field of metallurgy.

COVERAGE: This is a collection of articles on certain aspects of Soviet metallurgy. The book is dedicated to Academician Ivan P. Bardin on the occasion of his 75th birthday. The articles are divided into seven parts. The first part consists of professional activity of the Soviet metallurgist. It includes an article by John Chipman, Nicholas Gruzdi, and John Elliott (U.S.A.) describing their visit with Bardin in Moscow and also his visit to the United States. The second part consists of three articles dealing with raw materials and fuels for the Soviet metallurgical industry. The third part represents the major part of the book. It consists of 25 articles dealing with the various aspects of the metallurgy of pig iron and steel. The fourth part consists of two articles treating the metallurgy. The fifth part consists of three articles discussing certain aspects of physical metallurgy. The last part deals with general problems in the field of metallurgy. References are given after each article. No personalities are mentioned.

TABLE OF CONTENTS:

Voskoboynikov, V.G. (Doctor of Technical Sciences), and L.P. Shpurvich (Candidate of Technical Sciences, Central Scientific Research Institute of Ferrous Metallurgy). The Performance of Blast Furnaces With Increased Gas Pressure   222

Theodoric, V.I. (Candidate of Technical Sciences, Metallurgical Institute imeni A.A. Baykov, AS USSR). Blast Furnace Smelting Under Pressure and the Problem of Efficient Furnace Shape   838

Sheftrin, B.N. (Engineer, Engineering metallurgical Kombinat). Efficient Method of Subsidizing Blast Furnace Blast   247

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SOV/137-58-9-18533

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 50 (USSR)

AUTHOR: Voskoboynikov, V. G.

TITLE: The Effect of Sulfur Contained in Coke on the Coke Consumption in Open-hearth Smelting (Vliyaniye soderzhaniya sery v kokse na raskhod koksa pri domennoy plavke)

PERIODICAL: V sb.: Issled. domennogo protsessa. Moscow, AN SSSR, 1957, pp 138-147

ABSTRACT: Experimental data provided by the author can be used to solve problems dealing with the distribution of S between cast iron, slag, and gases and, in particular, to determine the alkalinity of slag required to obtain a desired composition of cast iron. The computations are based on the equation $L_s^t = (\Sigma S_{res}/[S]\ 1)/n$ where L_s^t is the constant of distribution of S between the slag and the cast iron at the temperature t of the slag at the time of its discharge; ΣS_{res} the quantity of S remaining in the furnace expressed in percent with reference to the weight of cast iron; n the relative amount of slag; [S] the sulfur content in the cast iron expressed in percent. If the values of ΣS_{res} and n are known, it is possible to compute the value of L_s^t and, subsequently,

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SOV/137-58-9-18533

The Effect of Sulfur Contained in Coke (cont.)

the coefficient of distribution of S at a temperature of 1450°C with the aid of the expression $L_s^{1450} = L_s^t/$, where is the temperature coefficient, which is computed with the aid of empirical formulae in accordance with the temperature of the slag at the time of its discharge; in turn the temperature of the slag may be calculated from the S content of the cast iron. Once the value of L_s^{1450} is computed, the alkalinity of the slag ($RO:SiO_2$) required for the achievement of necessary conditions for desulfurization may be computed with the aid of a graph derived by the author. The computational results indicate that the additional consumption of coke due to its increased S content, increases with an increasing richness of the charge. At a yield of slag, n=0.75, with a coke containing 1.0-2.1% S, an 0.1% increase in the S content of the coke corresponds to a 1.4% increase in coke consumption. At a greater content of S in the coke, the consumption of the latter increases and, at 2.5%, reaches a value of 2.1% per 0.1% S contained in the coke. At a yield of slag n=0.5 and a sulfurous coke (2.5% S), a 0.1% variation in S content produces a 5% change in the consumption of coke.

1. Open hearth furnaces--Operation   2. Coke--Consumption
3. Sulfur--Performance

F. K.

Card 2/2

VOSKOBOYNIKOV, V.I.

History of the origin of geographical names in Kamchatka. Izv.
Vses. geog. ob-va 94 no.1:55-61 Ja-F '62.   (MIRA 15:3)
(Kamchatka—Names, Geographical)

VOSKOBOYNIKOV, V.I., inzh.

Hose-type gas and heat protection apparatus. Bezop. truda v prom.
2 no.8:28-30 Ag '58.
(MIRA 12:7)

1.TSentral'naya nauchno-issledovatel'skaya laboratoriya voyeniziro-
vannykh gornospasatel'nykh chastey.
(Safety appliances)

18(5)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 3, p 186 (USSR)

SOV/112-59-3-5573

AUTHOR: Voskoboynikov, V. I.

TITLE: Investigation of Ventilating Conditions in Mines During Underground Fires by Means of an Electric Simulator (Issledovaniye ventilyatsionnykh rezhimov shakht pri podzemnykh pozharakh s pomoshch'yu elektricheskoy modeli)

PERIODICAL: Ugol' Ukrainy, 1958, Nr 1, pp 19-24

ABSTRACT: Using electric simulators permits adequately controlling mine ventilation, necessary for conducting rescue operations, during fires. Investigation of air redistribution in the ventilating system, depending on the point of fire, mining conditions, and rescue operations, can be conducted on an AEMVS electric simulator of ventilation systems built by Dnepropetrovskiy zavod selenovykh vypryamiteley (Dnepropetrovsk Plant of Selenium Rectifiers). The simulator is based on an analogy between air distribution in a ventilation system and current distribution in an electric network of the same

Card 1/2

SOV/112-59-3-5573

Investigation of Ventilating Conditions in Mines During Underground Fires by . . . .

configuration. The electric network resistors are selected with an allowance for the fact that the air flow through mine tunnels obeys the quadratic law. The coefficients for equations describing air distribution in the ventilation system are taken from data of the latest mine depression survey. The basic circuit diagram of the AEMVS simulator and its power-supply data are presented. A case of simulating the thermal depression of a fire and of various ventilation measures is examined. Five illustrations.

Ye. G. S.

Card 2/2

VOSKOBOYNIKOV, V.I., starshiy nauchnyy sotrudnik

Use of electric modeling to establish favorable ventilation
conditions in mines during underground fire extinction. Ugol'
Ukr. 4   no.7:16-20 Jl '60.   (MIRA 13:8)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya
Voyenizirovannykh gornospasatel'nykh chastey.
          (Mine fires)
          (Mine ventilation—Electromechanical analogies)

VOSKOBOYNIKOV, V.I., starshiy nauchnyy sotrudnik

Study of the parameters of a ventilating current passing through the focus of an underground fire. Trudy Sem.po gor.teplotekh. no.4:42-48 '62.

(MIRA 15:8)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya po gornospasatel'nomu delu.

(Mine fires)   (Mine ventilation)

VOSKOBOYNIKOV, Vladimir Ivanovich

Academic degree of Doctor of Medical Sciences, based on his defense
17 March 1955, in theCouncil of the Odessa State Medical Inst imeni
Pirogov, of his dissertation entitled: "The Significance in Legal
Medicine of Preliminary Blood Tests."

Academic degree and/or title: Doctor of *Medical* Sciences

SO: Decisions of VAK, List no. 27, 24 Dec 55, Byulleten' MVO SSSR,
     Uncl. JPRS/NY 548

VOSKOBOYNIKOV, V.K.

Effect of ultrasonics on the peripheral nerve fibers and nerve endings. Biul. eksp. biol i med. 50 no.12:98-102 D '60.

(MIRA 14:1)

1. Iz kafedry gistologii (nauchnyy rukovoditel' - prof. N.D. Zaytsev) i kafedry fiziki (zav. - prof. Ye.M.Skublevskiy) Stanislavskogo meditsinskogo instituta (dir. - dotsent G.A.Babenko). Predstavlena deystvitel'nym chlenom AMN SSSR V.V. Parinym.

(NERVES, PERIPHERAL)
(ULTRASONIC WAVES—PHYSIOLOGICAL EFFECT)

MAGDA, I.I., professor, doktor; SHALDUGA, N.Ye., assistent; VOSKOBOYNIKOV, V.M., aspirant.

New method of rumenotomy. Sbor.trud.Khar'.vet.inst. 21:425-431 '52.
(MLRA 9:12)

1. Kafedra operativnoy khirurgii Kharkovskogo veterinarnogo insti-
tuta.
(Veterinary surgery) (Stomach--Surgery)

GUBAREVICH, YA. G.; VOSKOBOYNIKOV, V. M.

"Experimental and clinical data on pituitrine and calcium chloride effect on cow uterus."

report submitted to 5th Intl Cong, Animal Reproduction & Artificial Insemination, Trent, Italy, 6-13 Sep 64.

VOSKOBOYNIKOV, V. M.   Assistant Professor, Vitebsk Veterinary Institute.

"Pathogenetic therapy with antibiotics for mastitis control in cows," Veterinariya, Vol. 37, No. 12, p. 51, 1960.

USSR/Diseases of Farm Animals. General Problems.   R

Abs Jour: Ref Zhur-Biol., No 15, 1958, 69469.

Author : Shalduga, N. Ye.; Voskoboynikov, V.M.; Korpantsev, V.A.
Inst   :
Title   : Intra-Osseous and Intravenous Alcohol-Chloral Hydrate
          Induced Narcosis in Swine.

Orig Pub: Veterinariya, 1957, No 7, 63-64.

Abstract: Chloral hydrate in a dose of 0.1 g. was dissolved in
          33% alcohol. In intra-osseous narcosis, the solu-
          tion was injected either into the red bone marrow
          substance of the second segment of the sternum
          or into the upper epiphysis of the humerus. In
          intravenous narcosis, the solution was injected
          into the great ear vein. Narcosis was setting in

Card   : 1/2

VOSKOBOYNIKOV, V.M., dotsent

Enucleation of the corpus luteum stimulates the sexual function.
Veterinatiia 41 no.2:82-84 F '65.   (MIRA 18:3)

1. Vitebskiy veterinarnyy institut.

GUBAREVICH, Ya G., prof.; VOSKOBOYNIKOV, V.M., dotsent; KOCHETOV, M.V.,
        kand. veterin. nauk

    Detecting subclinical forms of mastitis in cows. Veterinariia 41
    no.9:85-86 S '64.   (MIRA 18:4)

    1. Vitebskiy veterinarnyy institut.

VOSKOBOYNIKOV, V.M., dotsent

Combined treatment for the retention of placenta in cows. Veterinariia
41 no.3:69-70 Mr '64. (MIRA 18:1)

1. Vitebskiy veterinarnyy institut.

VOSKOBOYNIKOV, V.M., dotsent

Using the cesarean section. Veterinariia 40 no.10:39-40 O'63.

(MIRA 17:5)

1. Vitebskiy veterinarnyy institut.

MAKSIMOV, V.I.,dots.; VOSKOBOYNIKOV, V.M.,dots.; KOVSHIKOVA, L.P.,assistent

Conduction anesthesia in diagnosing infectious balanitis in
bulls. Veterinariia 36 no.1:64-66 Ja '59.   (MIRA 12:1)

1. Vitebskiy veterinarnyy institut.
         (Vaginitis in cattle)   (Novocaine)

Voskoboynikov V.M

SHALDUGA, N.Ye.; VOSKOBOYNIKOV, V.M.; KOSPERTSEV, V.A.

Intra-osseous and intravenous alcohol-chloral anesthesia in swine.
Veterinariia 34 no.7:63-64 Jl '57.   (MIRA 10:8)

1.Khar'kovskiy veterinarnyy institut.
            (Anesthesia in veterinary surgery)
            (Chloral) (Alcohol--Therapeutic use)

VOSKOBOYNIKOV, V.M., assistant.

Lumbar epidural anesthesia in cattle. Sbor. trud. Khar'. vet. inst.
22:399-407 '54.   (MLRA 9:12)

1. Kafedra operativnoy khirurgii i topograficheskoy anatomii Khar'-
kovskogo veterinarnogo instituta.
          (Anesthesia) (Veterinary surgery)

VOSKOBOYNIKOV, V. M., (Assistant Professor, Vitebsk Veterinary Institute)

Intravenous injection of novocain-penicillim solution in mastitis

Veterinariya vol. 38, no. ,10, October 1961 pp 59

VOSKOBOYNIKOV, V.M., dotsent

Pathogenic therapy combined with antibiotics in treating mastitis
in cows. Veterinariia 37 no.12:51-53 D '60. (MIRA 15:4)

1. Vitebskiy veterinarnyy institut.
(Udder--Diseases) (Cows--Diseases and pests)

VOSKOBOYNIKOV, V.M., dotsent

      Intravenous injection of a novocaine-penicillin solution against
      mastitis. Veterinariia 38 no.10:59-60 O '61.   (MIRA 16:2)

      1. Vitebskiy veterinarnyy institut.
            (Novocaine)   (Penicillin)   (Udder—Disease)

VOSKOBOYNIKOV, VN.

VOSKOBOYNIKOV, V.N., inzhener.

Water level indicators. Bezop.truda v prom. 1 no.9:36 S '57.
(MLRA 10:9)
(Liquid level indicators)

VOSKOBOYNIKOV, YE

SUBJECT:	USSR/Technical Schools	27-4-7/19

AUTHOR: Voskoboynikov, Ye., Director of Technical School Nr. 19 (Novosibirsk)

TITLE: News about Teaching (Novoye v uchebnom protsesse)

PERIODICAL: Professional'no - Tekhnicheskoye Obrazovaniye, April 1957, # 4 (143), pp 16-18 (USSR)

ABSTRACT: The article explains the theoretical and practical instructional methods used by the school with emphasis on industrial training. The author emphasizes that the foremen pay too little attention to the quality of the work done by the students, for which different reasons are quoted. However, corrective measures are being undertaken.

There is one photo.

ASSOCIATION:
PRESENTED BY:
SUBMITTED:
AVAILABLE: At the Library of Congress
Card 1/1

VOSKOBOYNIKOV, Ye.

New elements in the educational process. Prof.-tekh. obr. 14 no.4:
16-18 Ap '57.   (MIRA 10:4)

1. Direktor tekhnicheskogo uchilishcha no.19, Novosibirsk.
        (Novosibirsk--Technical education)

RUSINOV, A.A.; VOSKOBOYNIKOV, V.N.; DUBINKO, T.P.; ILYUSHIN, V.I.;
     VRUBLEVSKAYA, F.L.; BUNCHUK, M.I.; RYABEN'KIY, L.M.; MARGOLIN,
     D.I.; SAZYKINA, K.V., kand.ekon.nauk; BUGAREVICH, V.S.;
     KUPTSOVA, V.A.; KALINOVSKIY, M.D.; MELESHKEVICH, O.A.;
     TYABUT, M.A., red.; LAZARCHIK, K., red.; KALECHITS, G.,
     tekhn.red.

[Reference book on the establishment of work norms on collective
farms] Spravochnik po normirovaniiu truda v kolkhozakh. Minsk,
Gos.izd-vo BSSR, Red.sel'khoz.lit-ry, 1960.   151 p.
                                             (MIRA 14:3)
1. Akademiya sel'skokhozyaystvennykh nauk BSSR. Institut ekono-
miki. 2. Institut ekonomiki i organizatsii sel'skokhozyaystvennogo
proizvodstva Akademii sel'skokhozyaystvennykh nauk BSSR (for
Voskoboynikov, Dubinko, Ilyushin, Vrublevskaya, Bunchuk, Bugarevich,
Kuptsova, Kalinovskiy). 3. Starshiy inspektor Upravleniya po
orgkolkhoznym delam Ministerstva sel'skogo khozyaystva BSSR (for
Meleshkevich).
          (Agriculture--Production standards)

MARDER, M.I.; VOSKOBOYNIKOV, Yu.L.

Results of a competition for a better proposal to reduce the cost
of designing and building tank farms. Transp. i khran. nefti i neft-
prod. no.6:33-34 '64.   (MIRA 17:9)

1. Glavnefteonabsbyt UkrSSR.

VOSKOBOYNIKOV, Yu.D.

Vulcanization of conveyor belts. Put' i put.khoz. 9 no.4:39 '65.
(MIRA 18:5)

1. Glavnyy inzh. Kamyanitskogo shchebenochnogo zavoda, stantsiya
Kamyanitsy, L'vovskoy dorogi.

RAYTSES, V.B.; SHILKOVA, T.S.; VOSKOBOYNIKOVA, N.A.

Reviewed of A.A.IUrgenson's book "Nitriding in the power machinery
industry." Metalloved. i term. obr. met.   no.9:62-63 S '63.
(MIRA 16:10)

AUTHORS: Lyakhovich, L.S., and Voskoboynikova, N.A.

TITLE: Effect of isothermic hardening on the properties of 40X(40Kh)
              steel with boron

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 2,
              1963, 64, abstract 2B297 In collection:"Novoye v metalloved.
              i tekhnol. term. obrabotk. stali". Chelyabinsk, 1962,211-213.

TEXT: The investigation was carried out on Menape-type impact
samples and on blanks 4 mm in diameter and 10 mm long made of 4 x 4 x 1
14 x 40 x 1 steels. The samples were heated for hardening in a well-
reduced bath of the following composition: 60-70% KaJO3 and 40-30% NaCl.
The temperature of heating for hardening was 860 $\pm$ 10°C, the holding for
the samples was 5 min and for the blanks 40mm in diameter, 18 min. Isother-
mic hardening was carried out in an alkali bath (100% NaOH) with a mechan-
ical stirring at 330, 350, 400, 430 and 450°C for impact samples and at
350°C for the blanks 40mm in diameter. The holding in the hardening medium
for impact samples was 15, 20 and 30 min and for the blanks 40mm in dia-

Card 1/2

Effect of isothermic hardening...

S/276/63/000/002/010/052
A052/A126

meter, 20 min. The cooling after isothermic hardening was made in water. The toughness and hardness of the steels at different holdings and cooling temperatures was determined. The fracture of the steels after isothermic hardening and their microstructure were analyzed. There are 3 figures and 5 references.

T. Kislyakova

(Abstracter's note: Complete translation.)

Card 2/2

VOSKOBOYNIKOVA, S. B.   Cand Med Sci -- (diss) "Intravenous and intra-osseous anesthesia of children with preparations of barbituric acid." Khar'kov, 1957 12 pp 20 cm. (Khar'kov Oblastnaya Clinical Hospital. Khar'kov Med Inst), 200 copies. (KL, 15-57, 107)

SOLOV'YEV, V.; VOSKOBOYNIKOVA, S.

    Raise the standard of economic work. Fin.SSSR 19 no.8:65-68 Ag '58.
                                              (MIRA 11:9)

1. Zaveduyushchiy Kirovskim rayfinotdelom Moskvy (for Solov'yev).
2. Starshiy ekonomist Kirovskogo rayfinotdela Moskvy (for Voskoboynikova).
    (Moscow--Finance)

VOSKOBOYNIKOVA, S.B., kand. med. nauk (Khar'kov, ul. Artema, d. 23, kv. 18)

Two cases of traumatic diaphragmatic hernia. Nov. khir. arkh. no.2:
111-112 Mr-Ap '59.   (MIRA 12:7)

1. Kafedra detskoy khirurgii (zav. - prof. A.V. Gabay) na baze Khar'-
kovskoy oblastnoy klinicheskoy bol'nitsy.
        (DIAPHRAGM--HERNIA)